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09/660,093	09/12/2000	Mehmet Oguz Sunray		7323

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Docket Administrator (Room 3C-512)  
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EXAMINER

KADING, JOSHUA A

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/660,093

Applicant(s)

SUNRAY, MEHMET OGUZ

Examiner

Joshua Kading

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5,8-12,15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,8-12 and 15 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Claim Objections*

Claim 16 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is  
5 required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 16 states "all of the codes in the second subspace are assigned to one of the plurality of users on a timeshare basis for data communication." Claim 8, from which claim 16 depends, states "the codes in the second subspace are assigned to one of a plurality of users on a  
10 timeshare basis..." These say the same thing. The words "all of" in claim 16 are implied in claim 8 as there is no further qualification of how many codes are assigned in claim 8. It must be assumed then, that all of the codes are assigned to the second subspace.

### *Claim Rejections - 35 USC § 102*

15 The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Tiedemann et al. (WO 98/35514).

20

In regard to claim 1, Tiedemann et al. disclose "a method for partitioning code space in a communication system, comprising the step of:

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dividing a code space into at least two subspaces, where codes in the first subspace are assigned to at least one user at a time for a voice communication session and where all of the codes in the second subspace are assigned to one user for data communication (page 5, lines 9-10 show a code space being divided into at least two subspaces; page 7, lines 6-13 show that one remote station or user is assigned to the primary code channel which is taken to be the same as the first subspace, and the secondary code channels are taken to be the second subspace; page 1, lines 20-21 shows that the CDMA system allows for voice and data communications; page 7, lines 6-23 where the small amounts of data in the primary channel constitute voice data as is known in the art and can be read on page 5, lines 9-21)."

In regard to claim 2, Tiedemann et al. disclose "the method of claim 1, wherein codes are dynamically assigned between the at least first and second subspaces (page 8, lines 3-8 where both the primary and secondary channels use different codes as is known in the art; a user is initially using the code of the primary channel but must be assigned into the secondary channels or be dynamically assigned a code to accommodate an increase in user data flow)."

In regard to claim 3, Tiedemann et al. disclose "the method of claim 2, wherein a minimum number of codes are provided to the first subspace (it is inherent that there be a minimum number of codes (i.e. a minimum of one code) provided to the first subspace

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because the subspace in a code space system needs the codes in order to transmit data and without the minimum number of codes the subspace would be a waste)."

In regard to claim 4, Tiedemann et al. disclose "the method of claim 2, wherein a minimum number of codes are provided to the second subspace (it is inherent that there be a minimum number of codes (i.e. a minimum of one code) provided to the second subspace because the subspace in a code space system needs the codes in order to transmit data and without the minimum number of codes the subspace would be a waste)."

10

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

15 Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann et al.

Regarding claim 15, Tiedemann discloses the method of claim 1. However, Tiedemann specifically lacks "wherein all of the codes in the second subspace are assigned to one user for data communication." Although Tiedemann does not explicitly  
20 state that all the codes are assigned to one user, it would have been obvious to one with ordinary skill in the art to assign the codes to one user for the purpose of accommodating a large data transmission (page 5, lines 24-31 where it is suggested

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that if the data is large enough from one remote station or user, the codes in the secondary code space will be assigned to that user to accommodate the data transmission). The motivation for this being that the more channels assigned to a user the more data the user can send.

5

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann et al. in view of Gilhousen (U.S. Patent 5,751,761).

In regard to claim 5, Tiedemann et al. disclose the method of claim 2. However, Tiedemann et al. lack "a plurality of codes are unassigned to a subspace and are  
10 available for assignment to either subspace." Gilhousen however, discloses "a plurality of codes are unassigned to a subspace and are available for assignment to either subspace (col. 12, lines 20-40 where the BUSY list corresponds to unassigned codes and assigning an appropriate code to the requesting channel says that any channel  
15 from any subspace may request a code from the BUSY list)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the unassigned codes with the method of claim 2 for the purpose of having control over the assignment of codes to particular channels. The motivation for this being to accommodate channel requests for codes efficiently.

20 Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann et al. in view of Schilling (U.S. Patent 5,410,568).

In regard to claim 8, Tiedemann et al. disclose "a method for partitioning code space in a communication system, comprising the step of:

dividing a code space into at least two subspaces, where codes in the first subspace are assigned to at least one user at a time for a voice communication session while the codes in the second subspace are assigned to one of a plurality of users...for data communication (page 5, lines 9-10 show a code space being divided into at least two subspaces; page 7, lines 6-13 show that one remote station or user is assigned to the primary code channel which is taken to be the same as the first subspace, and the secondary code channels are taken to be the second subspace; page 1, lines 20-21 shows that the CDMA system allows for voice and data communications; page 7, lines 6-23 where the small amounts of data in the primary channel constitute voice data as is known in the art and can be read on page 5, lines 9-21)."

However, Tiedemann et al. lack "...on a time shared basis." Schilling however, discloses "...on a time shared basis (col. 2, lines 10-20 and figures 8 and 10 where the signal is a coded signal with time shared slots)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the time shared basis with the rest of the method for the purpose of having little or no interference between users. The motivation being allowing full duplex communication between a base station and user.

In regard to claim 9, Tiedemann et al. and Schilling disclose the method of claim 8. However, Schilling lacks "codes are dynamically assigned between the at least first and second subspaces." Tiedemann et al. however, further disclose "codes are

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dynamically assigned between the at least first and second subspaces (page 8, lines 3-8 where both the primary and secondary channels use different codes as is known in the art; a user is initially using the code of the primary channel but must be assigned into the secondary channels or be dynamically assigned a code to accommodate an increase in user data flow)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the dynamically assigned codes with the method of claim 8 for the same reasons and motivation as in claim 8.

In regard to claim 10, Tiedemann et al. and Schilling disclose the method of claim 9. However, Schilling lacks "a minimum number of codes are provided to the first subspace." Tiedemann et al. however further disclose "a minimum number of codes are provided to the first subspace (it is inherent that there be a minimum number of codes (i.e. a minimum of one code) provided to the first subspace because the subspace in a code space system needs the codes in order to transmit data and without the minimum number of codes the subspace would be a waste)." It would have been obvious to one with ordinary skill in the art at the time of invention to include minimum number of codes with the method of claim 9 for the same reasons and motivation as in claim 9.

In regard to claim 11, Tiedemann et al. and Schilling disclose the method of claim 9. However, Schilling lacks "a minimum number of codes are provided to the second subspace." Tiedemann et al. however further disclose "a minimum number of codes are provided to the second subspace (it is inherent that there be a minimum number of



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codes (i.e. a minimum of one code) provided to the second subspace because the subspace in a code space system needs the codes in order to transmit data and without the minimum number of codes the subspace would be a waste)." It would have been obvious to one with ordinary skill in the art at the time of invention to include minimum  
5 number of codes with the method of claim 9 for the same reasons and motivation as in claim 9.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann et al. and Schilling as applied to claim 9 above, and further in view of  
10 Gilhousen.

In regard to claim 12, Tiedemann et al. and Schilling disclose the method of claim 9. However, Tiedemann et al. and Schilling lack "a plurality of codes are unassigned to a subspace and are available for assignment to either subspace." Gilhousen however, discloses "a plurality of codes are unassigned to a subspace and are available for  
15 assignment to either subspace (col. 12, lines 20-40 where the BUSY list corresponds to unassigned codes and assigning an appropriate code to the requesting channel says that any channel from any subspace may request a code from the BUSY list)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the unassigned codes with the method of claim 9 for the purpose of having control over  
20 the assignment of codes to particular channels. The motivation for this being to accommodate channel requests for codes efficiently.

***Response to Arguments***

The objection to the Specification is withdrawn.

Applicant's arguments filed 27 February 2004 have been fully considered but

5 they are not persuasive.

Applicant argues that Tiedemann does not mention "various data types" and there is no record support for such a claim. The examiner respectfully disagrees. As pointed to by applicant, Tiedemann states, "the secondary code channels can be of  
10 various types, and each type can have the same or different transmission capacity as the primary code channel." It is true that Tiedemann does not explicitly mention the "type" of secondary code channels, but it is later stated on page 8, lines 4-6 that "small amounts of data are transmitted immediately on the primary code channel" that is, voice is transmitted on the primary code channel. Tiedemann continues, "for larger amounts  
15 of data, the channel scheduler assigns secondary code channels" that is, data is sent over the secondary channels. It is implied that the "type" of the secondary channels is that used for data communication. Further, Tiedemann is not saying that the "type" is defined by "the same or different transmission capacity as the primary code channel", Tiedemann is saying that the "type can HAVE the same or different transmission  
20 capacity as the primary code channel." Tiedemann is speaking to the characteristics of the secondary channels, not the type.

Applicant argues that Tiedemann does not read on claims 1-4, specifically that Tiedemann lacks that there is a code space divided into two subspaces and one is used for voice communication and one is used for data communication. The examiner respectfully disagrees. As stated in the rejections for claims 1-4 above, Tiedemann  
5 clearly divides a code space into two parts, the primary and secondary channels. As read on page 7, lines 6-23 and page 8, lines 4-6, Tiedemann clearly defines that small amounts of data traffic (voice) are transmitted over the primary channel and that large amounts of data traffic (non-voice or data) are transmitted over the secondary channels.

10 Applicant argues that Tiedemann in combination with Gilhousen or Schilling does not present a prima facie case of obviousness because none of the prior art reads on the applicant's claimed invention as presented in the independent claims. The examiner respectfully disagrees. As explained above and in the rejections for the claims, Tiedemann clearly reads on various limitations of applicant's invention, and thus is not  
15 deficient in reading on applicant's invention. Since Tiedemann reads on the independent claims of applicant's invention, Tiedemann in combination with Gilhousen or Schilling presents a prima facie case of obviousness.

Applicant lastly argues that Tiedemann teaches away from applicant's claimed  
20 invention and thus is prima facie evidence that the claimed invention is not obvious. The examiner respectfully disagrees. Again, as read on page 7, lines 6-23 and page 8, lines 4-6, Tiedemann discloses two communication channels. One of which communicates

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using small amounts of data or voice, evidence for this can be found on page 5, lines 2-3 where the 19.2 Kbps rate is known in the art as a voice transmission rate. Tiedemann continues to disclose that large amounts of data are transmitted in the secondary code channels. Again, it is known in the art that large amounts of data constitute non-voice traffic. Since examiner is allowed to interpret the claimed invention as broadly as possible [*In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)]. See also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)], Tiedemann fully reads on the claimed invention and does not teach away from it.

10

**Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

15

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

20

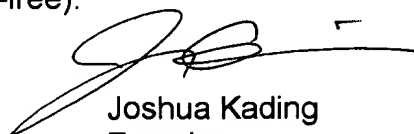
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (703) 305-0342. The examiner can normally be reached on M-F: 8:30AM-5PM.

- 5 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for  
10 published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

15



Joshua Kading  
Examiner  
Art Unit 2661

April 30, 2004

  
**KENNETH VANDERPUYE**  
**PRIMARY EXAMINER**